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# The Evolution of Strategic Thought

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# **Contemporary Security and Strategy**

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19. Baldwin, 'Security Studies', op. cit., p. 123; Betts, 'Should Strategic Studies Survive?', op. cit., p. 12–13.
20. Baldwin, 'Security Studies', op. cit., p. 124.
21. See Betts, 'Should Strategic Studies Survive?', op. cit., p. 13, especially note 11. Examples of the case-study research include D. Pike, *Viet Cong* (Cambridge, MA, 1966); J. Race, *War Comes to Long An* (Berkeley, CA, 1972); D. Blaufarb, *The Counterinsurgency Era* (New York, 1977); L. Cable, *Conflict of Myths: The Development of American Counterinsurgency Doctrine and the Vietnam War* (New York, 1986); D. M. Shafter, *Deadly Paradigms* (Princeton, NJ, 1988); T. Lomperis, *From People's War to People's Rule* (Chapel Hill, NC, 1996).
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23. Baldwin, 'Security Studies', op. cit., p. 124. See Betts, 'Should Strategic Studies Survive?', op. cit., p. 20, especially note 28.
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## CHAPTER 2

# The Evolution of Strategic Thought

J. Mohan Malik

The origins of modern strategic thought can be traced back to the classical strategists. An examination of their works shows that the basic questions with which they have grappled over the past two centuries have been remarkably constant. There are strategic principles that hold good for all times and for all arms – irrespective of changes in technology and strategies. Not only that, the historical background can help us to clarify and understand contemporary issues. To understand the present and the future we need to understand the past because events do not take place in a vacuum, they have their roots in history. We cannot understand what is happening in Russia or China today if we do not know their past. History matters. This is especially true of the principles of war and military strategy. But history is not the only guide to the future. The present provides the patterns that can help identify the directions of change. These days one hears so much about 'change' and 'revolution' in almost every field – changes in world politics, the economy, the revolution in communications technology, and of course the revolution in military affairs (RMA) – that the risk of losing sight of the continuities in human life is ever-present. Much has changed in our world, yet much remains the same.

War is a fascinating subject, central to any understanding of the world and the way it has developed. Despite the dubious morality of using violence to achieve personal or political aims, the fact remains that it has been used to do just that throughout recorded history. Men have studied war for almost as long as they have been making it. Detailed records exist from as far back as 1288 BC and the Battle of Kadesh between the Egyptians and the Hittites. 'War does not belong in the realm of art and science; rather it is a part of man's social existence', wrote Carl von Clausewitz.<sup>1</sup> Naval theorist Alfred Mahan concurred: 'Conflict is the condition of all life.'<sup>2</sup>

Strategy plays a very important role in war or any military operation. The word 'strategy' has its origins in the Greek word *strategos*, which is



normally translated as 'general'. Strategy, in that sense, has an obvious military character. However, since the Second World War civil institutions – businesses, corporations, non-military government departments, even universities – have come to develop strategies, by which they usually mean policy planning of any kind. Thus the term strategy is no longer the sole province of the military. As war and society have become more complicated, its definition has been broadened to include

consideration of non-military factors – economic, political, psychological, moral, legal and technological. In its fuller meaning, strategy is the art of mobilizing and directing the *total resources of a nation or community of nations*, including the armed forces, to safeguard and promote its interests against its enemies, actual or potential.<sup>3</sup>

In this broader sense, strategy is also called 'grand strategy'. In the military context, 'strategy' means policy or planning that involves the actual use or the threat of use of force; the application of force as an instrument of national policy.<sup>4</sup> The formulation of strategy is dependent on the geography, economy, society and politics of a given country. In other words strategy includes the development, intellectual mastery and utilisation of all of the state's resources for the purpose of implementing its policy in war.

When the classical strategists wrote about war and strategy they did not distinguish between strategy and tactics. Strategy is generally equated with policies, and tactics with the particular means used to implement those policies. It should be noted that strategy at the national level did not take place until the emergence of modern nation-state system in the fifteenth and sixteenth centuries. Martin van Creveld argues that 'Strategy in the sense that Napoleon, Jomini and Clausewitz made classic hardly existed before their time.'<sup>5</sup> According to Robert O'Neill, 'The strategy we read of in connection with the wars of the Greeks and Romans is little more than grand tactics.'<sup>6</sup> The current meaning of the term strategy, in the way it is used today, was first defined in the Oxford Dictionary in 1825, that is, in the immediate post-Napoleonic era. In recent times a more useful distinction has been made between the strategic, operational and tactical levels of warfare. The strategic level is concerned with the employment of a nation's entire armed forces in the larger totality of the nation's security; the operational with the employment of forces in a military campaign or operation; and the tactical with forces actually in contact with the opponent.

War is an unpredictable business, and because of this soldiers and scholars throughout history have searched for a magic solution to the business of war – some list of golden rules that, if satisfied, will guarantee victory. Past battles and campaigns have been closely studied and compared, the reasons for defeat or victory examined and a series of principles of war evolved. Battle changes for the soldier from war to war and often during them. Weapons are improved, accuracy is increased and lethality

grows over time. The horse is replaced by the tank and the spear by the rifle. At the lowest levels, warfare is vastly different from earlier times. The company commander of the 1991 Gulf War would probably have difficulty relating to the experiences of a centurion of the Roman Empire. However, at the operational and strategic levels these principles dominate the teachings of modern military institutions because they are a summary of great historical experience and provide guidelines for studying and thinking about war. But it is not knowledge of the principles alone that is important, rather the degree of intelligent use made of them. The Australian Army's current doctrine lists the principles of war as practical guides and warns that 'disregard of them involves risk and has often brought failure'.<sup>7</sup> The US Army Field Manual FM-100-5 states that the principles of war 'have essentially stood the tests of analysis, experimentation, and practice'.<sup>8</sup> The equivalent British *Army Field Manual* states: 'A study of the history of war reveals that its conduct is influenced by certain broad precepts which have come to be recognised as principles of war. Revolutions in technology, developments in weaponry and improvements in mobility have wrought changes in the application of these principles without detracting from their general validity'.<sup>9</sup> The timelessness and enduring relevance of the principles of war derives from their didactic purpose: they seek to explain neither why wars should be waged nor how battles should be fought, but how they may be won. That is why the philosophies of the classical strategists are still applicable as elements of modern and future defence strategy, and provide the tools with which to analyse existing strategies and proposals for the future.

This chapter outlines the fundamental tenets of modern strategic thought as it has evolved over the past three centuries and demonstrates their relevance in the post-nuclear information age of the twenty-first century. It is divided into four sections to discuss four out of five major schools of strategic thought – continental, maritime, aerospace, revolutionary and nuclear. The nuclear school of strategy is discussed in a later chapter. Though we cannot divide strategy into neat boxes, because in practice these theories do not stand alone, a separate, in-depth analysis of the origins of each school of strategy provides a convenient starting point for a proper understanding of the evolution of modern strategic thought. It is generally accepted that the joint application of these strategies is essential to victory in the age of joint warfare.

## The Continental School

Niccolo Machiavelli, Carl von Clausewitz, Antoine Henri de Jomini, Sun Tzu and Basil Liddell-Hart are the doyens of the continental school, which



is concerned with ground warfare between armies and has historically been the major instrument of geopolitical, military strategy. It has also been the main influence on the shape of warfare in the twentieth century. Machiavelli, Jomini and Clausewitz are described as the strategists of 'offensive war' whereas Liddell-Hart and Sun Tzu are described as the strategists of 'limited or defensive war'. The strategists of offensive war were committed to the Clausewitzian conviction that the destruction of enemy armies is the ultimate objective of war and that navies and air forces exist primarily to transport troops to the combat zone and support them in situ. The horror of the unjustifiable enormity of the loss of life on the battlefield during the First World War prompted strategists such as Liddell-Hart, J.F.C. Fuller and others to seek ways to avoid attrition warfare and manoeuvre theorists came to the fore. Interestingly, such theories had already been propounded by Sun Tzu in 500 BC.

## Machiavelli

Machiavelli is said to have laid the foundations of military strategy. The politico-strategic environment before Machiavelli was characterised by the personal wars of kings and princes, temporary private armies, poorly trained soldiers who were often mercenaries, personal acts of bravery, the wars of the Crusades, endless sieges and inconclusive battles. Writing in an era of 'might is right', when every large state believed in the expansion of its territory and power by the use of force, Machiavelli was the first political thinker to grasp the competitive nature of the global system. He saw politics as a struggle for survival between growing and expanding organisms – in which wars were natural and necessary. He concluded that the existence of such an organism depended on its capacity for war and tried 'to extricate the conduct of wars from the sterile concepts of his times'.<sup>10</sup> He believed that political institutions must be organised in such a way as to create favourable preconditions for the functioning of the military. This theme dominates all of Machiavelli's works. In *The Art of War* he dissociated warfare from religious and ethical inhibitions and related it to constitutional, economic and political factors. That defence of a state was the responsibility not of a special privileged group or the ruler but the concern of all those in society was the first lesson Machiavelli drew from his study of warfare in the Middle Ages. His advocacy of conscription assigned Machiavelli a prominent place in the development of military thought. Thus he foresaw what would happen in the future.

The key elements of Machiavelli's thought are as follows. First, war is an important activity in political life. Second, the existence of struggles and uncertainties shapes the character and methods of war. Third, the aim of

war must be the total defeat of the enemy. Fourth, wars must be 'short and sharp'. They must be ended as quickly as possible with the attainment of a definite result. Fifth, since everything depends on the outcome of the battle, everything possible must be done to ensure victory, including the full use of forces even if the enemy seems of inferior strength. Sixth, a decisive battle should be the aim of every military campaign, and every military campaign must be a planned and coordinated operation. Seventh, command must be in the hands of one person. Eighth, military success depends on order and discipline. Ninth, there should be a close and harmonious relationship between the political and military authorities and institutions. Finally, mercenaries cannot ensure victory; a state must have its own 'proper army'.<sup>11</sup>

The problems Machiavelli discussed are not bound to any historical period. For example during the French Revolution, military organisations and the conduct of war assumed new forms due to the growth of engineering and technology. But still Machiavelli's ideas – the establishment of military institutions and conducting war in accordance with rational, valid rules – retained their vitality. It is noteworthy that Clausewitz, who was extremely critical and contemptuous of other military writers, conceded that Machiavelli 'had a very sound judgement in military matters'.<sup>12</sup> Despite the new features that Clausewitz introduced and were outside the framework of Machiavelli's thought, he agreed with Machiavelli that the validity of any analysis of military problems depended on a correct concept of the nature of war.

## Jomini and Clausewitz

From 1784 onwards, French armies crushed their European opponents, began to transform the political structure of Europe and brought Napoleon Bonaparte to power in France. These were the times of great upheaval. Napoleon's military successes provided valuable lessons for the understanding of military operations. Napoleon's genius at the strategic and operational levels of war was a major catalyst for the development of the continental school of strategic thought throughout the nineteenth century. Under his leadership the French produced the first mass army in modern history and other European powers were forced to follow suit. Foremost among the new school of military authors to emerge during the Napoleonic era were the Swiss Antoine Henri de Jomini (1779–1869) and the Prussian Carl von Clausewitz (1780–1831), who had an everlasting influence on both military theory and popular conceptions of warfare.

Prior to the nineteenth century, Europe also experienced a wave of philosophical thought known as the Enlightenment, which emphasised



rational objective analysis and the search for clarity. A succession of writers attempted to uncover the scientific principles underlying the conduct of war, confident that military art 'like all others is founded on certain and fixed principles'.<sup>13</sup> The Enlightenment gave way to a period dominated by German idealists and Romantic philosophers, who focused on the psychological, emotional, subjective and intuitive dimensions. Henceforth military thought followed one of two paths: a retrospective one, looking to the Enlightenment and seeking scientific correctness; and a forward looking, Romantic one that saw war as the 'realm of the uncertain and unpredictable, a matching not so much of intelligence as of will, personality and moral fibre'.<sup>14</sup> Jomini followed the Enlightenment line and by searched for certain and fixed principles of war, whilst Clausewitz combined the best of the traditional Enlightenment with the German romantic tradition. Together Jomini and Clausewitz are regarded as the forefathers of modern strategy. While Clausewitz is the most prominent and well-known authority on war and strategy today, the name of Jomini was synonymous with military wisdom in the nineteenth century. Their lives were full of striking similarities and violent contrasts.<sup>15</sup>

#### *Similarities in the Works of Jomini and Clausewitz*

A careful comparison of Jomini's *Summary of the Art of War* (1838) and Clausewitz's *On War* (1831) discloses a considerable amount of common basic military theory. Both wrote of the tactical and strategic method, and each appreciated the great importance of morale. Clausewitz advocated simplicity of plans and emphasised the 'friction' of war. For Jomini, simplicity in battle planning was a cardinal virtue because he believed that 'the more simple a decisive manoeuvre is, the more certain will be its success'. Both frequently referred to the 'drama' of war; war was something fluid, changing and subject to chance. Both emphasised the destruction of enemy forces as the key objective of a military operation. Both were primarily concerned with land warfare. Both were fully aware of the value of surprise and the advantages of the strategic initiative. Both emphasised the need to concentrate forces upon the 'decisive point' of battle. Both were the strategists of offensive war. Clausewitz's *On War* simply reinforced Jomini's emphasis on the massive, aggressive use of force.

#### *Differences in the Lives and Works of Jomini and Clausewitz*

Despite several similarities in the works of Jomini and Clausewitz the outlook of the two men was very different. For example they looked upon each other as competitors or rivals in the field of military writing. While it is

not certain if the two ever met, it is known that they disagreed in print for years. For Jomini, historical events formed the basis of his own grasp of the strategic principles of war. But Clausewitz disagreed sharply with a number of Jomini's specific historical judgments and charged him with two faults – theoretical bias and inadequate knowledge. Clausewitz read Jomini's *History of the Major Military Operations*, published in 1804–5, and considered it good, but felt that Jomini had not sufficiently distinguished the incidental from the essential. Jomini, in turn, regretted that Clausewitz had not lived to read his *Summary of the Art of War*, believing that this might have converted Clausewitz to Jomini's point of view. Some key points of difference are discussed below.

1. *The practitioner versus the philosopher or the tactician versus the strategist.* The fundamental difference between the two is that while Jomini wrote principally as a practitioner of war, Clausewitz wrote as a philosopher of war.<sup>16</sup> Indeed Clausewitz wrote *On War* as an intellectual exercise to satisfy himself, while Jomini wrote in order to publish his works and further his career. Clausewitz's interest in theology and Kant's philosophy led him to explore the philosophical components of war and the basic nature of war. Jomini was more concerned with the practical aspects of war and thus sought to construct a theoretical system for winning wars. Therefore it is said that Clausewitz wrote at the strategic level of war while Jomini wrote at the tactical and operational levels of warfare. For example Jomini's doctrine focused on the importance of manoeuvre, the use of interior lines, the role of intelligence and careful planning, and the need for strategic reserves to determine victory.

Jomini's key objective was to identify principles and rules that would enable a commander to wage wars successfully. Jomini believed that there was one principle underlying the success of both Napoleon and Frederick the Great: 'the concentration of one's forces successively on the decisive points in the theatre of war, and as far as possible against the communications of the enemy without disrupting one's own'. This objective could best be achieved by the mastery of what he called 'interior lines'.<sup>17</sup> Jomini's concept of interior lines of operations refers to one side striving for a position within separated enemy forces, making it possible to independently to strike elements of the enemy force. Jomini hoped to provide the army commander with a practical manual that would 'guide him in the task of directing operations in the midst of the noise and tumult of battle'.<sup>18</sup> For him, warfare revolved around his basic ideas that: 'Strategy is the key to warfare; all strategy is controlled by invariable scientific principles; and, that these principles prescribe offensive action to mass forces against weaker enemy forces at some decisive point, if strategy is to lead to victory'.<sup>19</sup> He believed that these principles 'could be disregarded only with the greatest danger'.<sup>20</sup>



Jomini's principles were prescriptions for strategic choices. For example where to fight, for what purpose and in what force. In fact '[s]trategic choice ... remains a basic problem even in an age of microelectronics, nuclear energy and the exploitation of "space" itself for military purposes'.<sup>21</sup> In Jomini's view most military commanders made the wrong strategic choices because they did not understand the principles of strategy. Those principles he summarised in one sentence as 'bringing superior force to bear on a point where the enemy is both weaker and vulnerable to crippling damage'.<sup>22</sup>

Clausewitz denied the validity of such formulations. Why? One, because they were oversimplifications, and two, because they ignored what Clausewitz saw as the essence of war. He said that Jomini's principles 'aim at fixed values; but in war everything is uncertain ... all military action is intertwined with psychological forces and effects'. While Jomini was adamant that Napoleon's success came from the application of these scientific principles, Clausewitz was not convinced. For Clausewitz there were no laws or rules that could determine success on the battlefield. For him, in war 'many roads lead to success'.<sup>23</sup> Clausewitz was more concerned with philosophical analysis than prescription and he sought to penetrate 'the essence of absolute war [and] ... to understand war in the various forms it actually takes, as a social and political phenomenon, and in its strategic, operational and tactical aspects'.<sup>24</sup> His theory is as successful in presenting the calculating and rational side of war as in analysing its non-rational and unpredictable qualities.

In short, Clausewitz put more stress on the importance of morale and psychological factors in warfare than did Jomini's theory of 'scientific warfare'. Clausewitz did recognise certain definite principles of war, which he considered simple common sense. Unlike Jomini he did not try to develop 'system' for waging war. He felt that war was 'too complex to be reduced to a neat system of rules and diagram'.<sup>25</sup> No theory of war can be intellectually correct and complete.

2. *The centre of gravity.* A key feature of Clausewitz's conception of grand strategy is his theory of the 'centre of gravity or strength', which is 'that point in the enemy's organism – military, political, social, economic, etc. – at which, should he be defeated, or should he lose it, the whole structure of national power will collapse'.<sup>26</sup> According to Clausewitz, the ideal strategy is to identify the enemy's centre of gravity, and then to direct all one's energies against it. Clausewitz gave three examples of the 'centre of gravity': the opponent's army; its capital; and if it had a strong protector, the army of this ally. This Clausewitzian thesis of strikes against the enemy's centre of gravity was similar to Jomini's idea of massive strikes against the enemy's 'decisive point' – that point in the enemy's defences which if attacked, destroyed or captured would cause the enemy's total collapse.

For example, during the 1990–91 Gulf War the Iraq Republican Guard, communications, military installations and command and control systems were identified as what Clausewitz called 'the centre of gravity' and Jomini called 'the decisive point'.

Nonetheless, Jomini's idea of massive strikes against the enemy's decisive point was dismissed by Clausewitz, who saw it as an attempt to 'reduce the whole secret of the art of war to the formula of numerical superiority at a certain time in a certain place'.<sup>27</sup> According to Clausewitz, this was an 'oversimplification which would not have stood up for a moment against the realities of war'.<sup>28</sup>

On the surface, Jomini's own formula does not look very different from that of Clausewitz – 'the best strategy is to be very strong; first in general, and then at the decisive point'.<sup>29</sup> But in reality there is some difference. Whereas Jomini wrote many chapters analysing where and what that decisive point might be, Clausewitz saw the main problem as a moral one; that is, the capacity of the commander to maintain his determination and will against all odds and then concentrate his forces against the decisive point. Anyone undertaking a war enters the realm of chance.

For Clausewitz war was a messy affair that could not be reduced to a set of lessons and laws. There is no strategy that will always succeed. Military commanders have to live by their wits as much as by their intelligence. Courage alone is not enough. What is required is an intelligent application of force at the right time, at the right place. Thus Clausewitz sought to destroy the formalistic strategy of manoeuvre that was in vogue during this period, largely due to Jomini's influence.

3. *The role of logistics or supplies.* For Jomini, supply or logistics was a serious problem; his writings show that 'he understood the important place of logistics in mobile and expansive warfare'.<sup>30</sup> As J. D. Hittle notes:

Jomini's experience in the Peninsular campaigns and in the Russian invasion convinced him of the difficulty of waging successful war against a nation resorting to what we currently call 'the scorched earth' policy. Our modern field commanders are still struggling with the problem that worried Jomini: how to keep supplies abreast of rapidly moving troops.<sup>31</sup>

In this respect he was much more practical in his appreciation of logistics than Clausewitz, who tried to separate military supplies from the business of war. Clausewitz believed that matters that do not relate to the act of fighting but only to the maintenance of equipment and care of the sick are not important.

But for Jomini, supply was closely connected with the entire pattern of war and helped determined the outcome of military operations. Once again, after the Gulf War General Norman Schwarzkopf revealed the importance



of Jomini's influence on the logistical planning of Operation Desert Storm. He said: 'I would not move against Saddam until there were 60 days' stocks on the ground. My operations guys said that we could wind up the whole affair in 30 days, but Jomini had recommended to prepare for twice the length of the operation. I took his advice.'<sup>32</sup>

4. *The relationship between political and military authorities.* Jomini 'saw war largely in personal, heroic terms, controlled by the masterful commander'.<sup>33</sup> To Jomini, the examples set by Frederick the Great and Napoleon suggested that wars should be fought by rulers, who combined in their own persons, political and military leadership. He had very little to say about the relationship between political and military authorities. But as democracy, bureaucracy and meritocracy began to transform the military by 1800, the political relationship became problematic. However Jomini did not address this problem. Soldiers could find what they wanted in Jomini's writings: good arguments against strict subordination to political authority. Jomini believed that once a war started the political leadership must leave the military commander free to wage war according to scientific principles that the military had identified.<sup>34</sup> In other words, Jomini was against any political interference in military matters.

While Jomini insisted on the supremacy of military leadership, Clausewitz insisted that the political leadership had to have the last word, because the nature of policy determined the nature of war and political circumstances shaped strategy. After all, as Clausewitz put it: 'War is nothing but the continuation of policy with other means.'<sup>35</sup> For Clausewitz 'real war' comprised three elements referred to as the 'remarkable trinity' and seen as the main areas of action by different segments of society: *the people*, representing violence, passion and the exercise of popular will; *the army*, representing the interplay of chance and uncertainty that characterise military operations; and *the government*, representing the importance of politics in selecting ends, allocating means and controlling escalation. That is why Clausewitz saw war 'in what may be called tragic terms, always threatening to escape human control'.<sup>36</sup> Clausewitz wrote that in the study of war, a trilogy comprising the government, the military and the people must be considered, and to ignore any part of the trilogy would render any analysis useless. Thus Clausewitz brought out the political nature of war: war as a means to an end, not an end in itself. War should be brought to an end as soon as the objective is achieved. In other words, war is essentially subordinate to politics. A close integration of politics and war is a central thesis of the Clausewitzian perception of the war. Perhaps that is why he is more popular than Jomini in this age of democracy.

Again we can see the continued relevance of the classical strategists during the 1991 Gulf War, where the subordination of war to political objectives was evident. President Bush's decision, against General Schwar-

kopf's advice, to end the war when the main objective had been achieved reflected the political objective. The coalition nations did not want to push for the total destruction of the Iraqi armed forces nor the removal of their leader. Jomini would have certainly disapproved of Bush's decision to terminate the war, but Clausewitz would have supported it.

5. *The concept of 'friction'.* Another of Clausewitz's important contributions to military thought was his very practical concept of 'friction in war' to explain why military theory often proved so difficult to put into practice. 'It is friction', said Clausewitz, 'that distinguishes real war from war on paper. Everything in war is very simple, but the simplest thing is very difficult.'<sup>37</sup> Clausewitz wrote of the uncertain nature of war. For him, war was shrouded in friction, ambiguity, uncertainty and chance. So what is this 'friction'? It is basically Murphy's Law: anything that can go wrong will go wrong. Anything that reduces military capability and affects the outcome of war is called friction. It is caused by fear, exhaustion, stress, suffering, confusion and unpredictable factors such as bad weather. Each war is like sailing an uncharted sea, full of reefs. If a fog descends it may wholly wreck an advance; but it could equally help prevent an agonising defeat.

In his search for the scientific principles underlying war, Jomini initially underestimated or ignored the qualities of personal leadership that enabled Napoleon and many others to snatch victory out of disaster. Half acknowledging this – perhaps after reading Clausewitz's *On War* – Jomini later emphasised that 'war is a great drama, in which a thousand physical or moral causes operate . . . and which cannot be reduced to mathematical calculations. . . . War is not an exact science, but a drama full of passion'.<sup>38</sup> Thus, Jomini ended up saying exactly what Clausewitz had already said about the uncertain nature of war.

6. *Objectives and types of war.* Unlike Clausewitz, Jomini conceived of warfare in largely spatial terms, that is, territorial gain was the true objective of armed conflict. Furthermore Jomini gave major emphasis to the offensive; Clausewitz to the defensive offensive. For Clausewitz, defence was a stronger form of warfare than offence, for it is easier to preserve than to acquire.

7. *Civil wars or people's wars.* While Jomini detested the concept of 'civil war' or 'people's war', Clausewitz considered that people's wars could be highly effective if carried out in conjunction with the operations of a regular army. Critics argue that Jomini tended to ignore historical cases of these, which undermined his 'scientific theory of war', and his silence on civil wars is a good example of this. In a civil war the enemy is everywhere and



yet nowhere to be seen, which makes it difficult to identify the 'decisive point' against which massive attacks can be launched.

8. *Maritime warfare.* Unlike Clausewitz, Jomini had a sound appreciation of maritime power and discussed maritime warfare, probably due to the French plans to invade England at the height of Napoleon's success. Jomini made important – although indirect – contributions to the development of naval doctrine. Clausewitz, as a Prussian, had no need to consider this type of operation.

9. *The value of bushes and woods.* Jomini was the product of an age that thought in terms of mass and manoeuvre. He showed an amazing understanding of the use of cover and concealment, and pointed to the importance of using what was naturally present in the terrain to shelter troops from artillery fire. To Jomini, the prudent use of natural cover to mask movement and a detailed supply plan were important elements of a successful campaign. He criticised Clausewitz's view that 'the who occupies a bush acts blindly, and discovers nothing of what the enemy is doing'.<sup>39</sup>

In short, a comparison of their ideas reveals the fundamental difference in their approach to the study of war. Clausewitz wrote at the strategic level while Jomini wrote at the operational and tactical levels. Jomini was architecturally geometric; Clausewitz was artistically holistic.

It should be noted that the differences between the strategic thoughts of Jomini and Clausewitz have been overemphasised to some extent because of their tendency to see one another as competitors. There were some points relating to theory and technique upon which Jomini and Clausewitz did disagree, yet 'when their works are compared . . . on the basis of broad concepts, much military thinking is common to both'.<sup>40</sup> In fact, Jomini's practical teachings tend to complement Clausewitz's philosophical analysis. And the Prussian's emphasis upon the intangible components of war seems to give greater strength to Jomini's principles. There is nothing illogical or contradictory in this because 'both were writing of the same thing – the new type of war born in the Napoleonic era'.<sup>41</sup> Much of modern military thinking is based on their works. Many of Clausewitz's concepts – such as friction, the key role of human behaviour in the face of battle, the political nature of war, the centre of gravity, and the culminating point of victory – are timeless and form the basis of much of today's strategic thought. Clausewitz is said to have done the same for the study of war as Adam Smith did for the study of economics. Clausewitz has a timeless quality, but Jomini should not be dismissed. The influence of both Clausewitz and Jomini is enduring and substantial.

### Liddell-Hart and Sun Tzu

Basil Liddell-Hart is famous for his 'strategy of the indirect approach', and as the prophet of mechanised warfare or *blitzkrieg*. The strategy of the indirect approach first found full expression in 1929 in a volume entitled *The Decisive Wars of History*.<sup>42</sup> Liddell-Hart's ideas were influenced by his disenchantment with the misconduct of the First World War. He witnessed the terrible devastation and killing caused by what he believed was a faulty strategy based on Clausewitzian doctrines and leading to the brutality of trench warfare. He was not a pacifist, however, and he never believed that war could be avoided altogether. His objective was to consider how war could be fought more cleanly, more decisively, more intelligently and, above all, as humanely as possible.

While Clausewitz was the strategist of 'offensive war', Liddell-Hart was the strategist of 'defensive or limited war'. He believed that given the changes in military technology, offence was no longer the correct strategy. Rather the 'indirect strategy' of manoeuvre and surprise, which forced the enemy to disperse his forces, was the correct strategy. Thus, in a deeper and wider sense than Clausewitz implied, the defensive is the stronger as well as the more economical form of strategy.

His main conclusion was that 'the strength of the enemy . . . is dependent upon stability or "equilibrium" of control, morale and supply'. He said: 'in all the decisive campaigns, the dislocation of the enemy's psychological and physical balance has been the vital prelude to a successful attempt at his overthrow. This dislocation has been produced by the indirect approach.' He crystallised the lessons of the history of war into two simple maxims: one negative, one positive. 'The first is that . . . no general is justified in launching his troops to a direct attack upon an enemy firmly in position.' To do so is like knowingly hitting one's head against the wall. Second, 'instead of seeking to upset the enemy's equilibrium by one's attack, it must be upset before a real attack is, or can be successfully, launched'. As he put it: 'The soundest strategy is to postpone the battle, and the soundest tactics to postpone attack, until the moral dislocation of the enemy renders the delivery of a decisive blow practicable.'<sup>43</sup>

Liddell-Hart's definition of strategy is 'the art of distributing military means to fulfil the ends of policy'.<sup>44</sup> The heart of military strategy is the battle of resolve between the two opponents. According to Liddell-Hart, 'in war the chief incalculable is the human mind, which manifests itself in resistance . . . [strategy's] purpose is to diminish the possibility of resistance'.<sup>45</sup> This struggle of will and wits has brought strategists as far removed as Clausewitz, Liddell-Hart and Sun Tzu to place heavy emphasis on the psychological dimension of conflict.

Liddell-Hart was not the first strategist to consider the indirect approach – many of the maxims developed in his writings had also been expounded



by Sun Tzu in about 500 BC. Indeed Sun Tzu was the first to advocate an indirect approach. He contended that 'in all fighting . . . indirect methods will be needed in order to ensure victory'.<sup>46</sup> Sun Tzu's military ideas contained many of the tenets of the indirect approach: deception, speed, avoidance of attrition, striking what is weak and vulnerable, emphasis on manoeuvre and, more importantly, attacking the enemy's will to fight.<sup>47</sup> Sun Tzu's *The Art of War*, is the oldest military work in existence. It deals with principles and fundamentals that are as relevant today as they were centuries ago. It teaches how to win with a minimum of fighting – by knowing the enemy, deceiving the enemy and exploiting the enemy's weaknesses. Liddell-Hart had great respect for Sun Tzu, and called him 'that great master, Sun'.

However it was Liddell-Hart who, after a study of past campaigns, first formalised the concept of the 'indirect approach'. Liddell-Hart claimed no originality for the concept, but rather drew the principles from the study of decisive military campaigns in history.

He wrote: 'in history, the indirect approach has normally consisted of a logistical military move directed against an economic target – the source of supply of either the opposing state or army.' 'The chief objective is to undermine the opponent's will and to induce his collapse or dislocation.'<sup>48</sup> There are various means of doing this, depending on the circumstances of the crisis. Bloody fighting may be necessary, and armed forces need to be prepared for it. But skilled strategists seek to minimise or avoid such direct clashes. The most effective indirect approach is one that lures or surprises your opponents into a false move – so that they become victims of their own plans.

Liddell-Hart identified eight maxims – six positive and two negative – which apply to both strategy and tactics.<sup>49</sup> The indirect approach is concerned with dislocation and exploitation by means of manoeuvre and surprise. His positive maxims are as follows. First, adjust your end to your means. It is not wise 'to bite off more than you can chew'. Second, always keep your objective in mind while adapting your plan to the circumstances. Third, choose the line that is least expected. Try to put yourself in the enemy's shoes, and anticipate what they will foresee or try to forestall. Fourth, exploit the line of least resistance. Fifth take a line of operation that offers alternative objectives. Thus the enemy will not be sure what you are going to do next. Finally, ensure that both plan and dispositions are flexible – adaptable to circumstances. His two negative maxims are: do not attack an enemy who is on guard; and do not launch an attack along the same lines or in the same form as one that has once failed.

The essential truth underlying these maxims is that for success, two major problems must be solved – dislocation and exploitation. One precedes and one follows the actual blow. In short a strategy requires a clear understanding of the objective, a detailed appreciation of the opponent's

and one's own capabilities and a thorough knowledge of the likely operating environment.

Here there is a remarkable similarity between the views of Liddell-Hart and Sun Tzu. Sun Tzu summarised much of this argument in the following words: 'If you know the enemy, know yourself, your victory will never be endangered. Know the ground, know the weather, your victory will be total.' Like Liddell-Hart, Sun Tzu advised that battle should be avoided unless all considerations are favourable. The key to Sun Tzu's thought is that the ultimate victory is inducing a surrender without striking a blow. He believed that it is more important to kill the enemy's courage than to kill the enemy's soldiers. Like Liddell-Hart, Sun Tzu advised against repeating tactics which have gained you one victory. Sun Tzu's *The Art of War* possesses an enduring beauty, both in its language and in its simplicity. In a few pages it lays out the basic principles for planning and executing a military campaign, examines the qualities of good leadership, and sets criteria for judging whether the political ends justify the military means.<sup>50</sup>

According to Liddell-Hart, a strategist's objective is 'not to seek battle' but rather to 'seek a strategic situation so advantageous that if it does not of itself produce the decision, its continuation by battle is sure to achieve this. In other words, dislocation is the aim of strategy', its sequel may be . . . the enemy's dissolution.'<sup>51</sup> Sun Tzu's ideas regarding strategic objective bear a close resemblance to Liddell-Hart's. Sun Tzu wrote that in general 'the best policy is to take the state intact; to ruin it is inferior to this. To capture the enemy's army is better than to destroy it. To subdue the enemy without fighting is the acme of skill. Those skilled in war subdue the enemy's army without battle. They capture his cities without assaulting them, and overthrow his state without protracted operations.'<sup>52</sup> History shows that very few countries have ever benefited from a long, protracted war (witness Vietnam, Afghanistan, Iran and Iraq). So wars of attrition must be avoided. According to Liddell-Hart and Sun Tzu, the perfect strategy would therefore be to produce a result without any serious fighting. The psychological action itself should be so effective that the enemy surrenders without any physical action being required.

Now, how is this strategic psychological and physical dislocation produced?<sup>53</sup> It is produced by a combination of political, economic, social and military means. In the physical or logistic sphere, dislocation is caused by a move that (1) upsets the enemy's disposition and, by compelling a sudden 'change of front', disrupts the distribution and organisation of the enemy's forces; (2) separates the enemy's forces; (3) endangers the enemy's supplies and communications; and (4) threatens the enemy's lines of retreat, which could be used by the enemy to reestablish themselves.<sup>54</sup> In the psychological sphere, dislocation is caused by surprise, speedy movement or the ability to impose threatening circumstances. According to Liddell-Hart, these two elements – surprise and movement – react with each other.



'Movement generates surprise and surprise gives impetus to movement.' Psychological dislocation fundamentally springs from this sense of being trapped.<sup>55</sup> He suggests that a clever commander will take the *line of least expectation* to attack the enemy's rear. A move towards an opponent's rear not only causes physical redeployment of the opponents forces but also creates the feeling of entrapment. The psychological impact is such that an enemy will react, sometimes disproportionately, to protect the rear. The impact is greater if the move is sudden.

Surprise and movement form the cornerstone of success in the psychological dimension. A rapid move offers the potential to get inside the enemy's decision cycle. This concept is the basis of the manoeuvre theory currently embraced by most armies.

Only when the physical and psychological dislocations are combined does the strategy become an 'indirect approach'.<sup>56</sup> Liddell-Hart refers to Stonewall Jackson's motto: 'Mystify, mislead and surprise', or in General Sherman's terms, 'put your enemy on the horns of a dilemma'.<sup>57</sup> In particular, the concepts of surprise, flexibility, economy of force, mobility and morale are inherent to the successful application of a strategy of indirect approach. Once again, Liddell-Hart's ideas bear close resemblance to Sun Tzu's:

All warfare is based on deception. Therefore when capable, feign incapacity; when active, inactivity. When near, make it appear that you're far away. When far away, that you're near. Offer the enemy a bait to lure him, feign disorder and strike him. Speed is the essence of war.<sup>58</sup>

Liddell-Hart's strategy is aimed at *bringing about the physical and emotional or psychological dislocation of the enemy*. Why? Because the strength of the enemy depends on the physical and psychological balance of its forces. It is the feeling of being trapped that accelerates the enemy's dislocation. This dislocation is produced by surprise, manoeuvre and deception. By identifying economic targets, Liddell-Hart is stressing that it is not correct to direct an attack against the enemy's military strength alone. It is better to attack the enemy by seeking out the communications and support facilities. While planning an attack on the enemy's communications, we should remember that the farther from the front the enemy's lines of communication are cut, the greater the impact on the enemy army. This attack on non-military targets forces the enemy to change their direction of action and upsets their plans of war. Sun Tzu also believed that the aim of strategy is the destruction of the enemy's morale, leading to dislocation and defeat.

Furthermore, Liddell-Hart's recommendation to take the *line of least resistance or the line of least expectation* sounds very similar to what Sun Tzu recommended.<sup>59</sup> Sun Tzu said: '[t]ake advantage of the enemy's unpreparedness, travel by unexpected routes and strike him where he has taken no precautions' Sun Tzu stressed the need for the use of an indirect

route to close with the enemy. If you want to gain an advantage over an enemy, lull them into a false sense of security. Sun Tzu advised: 'The enemy must not know where I intend to give battle, he must prepare in a great many places. . . . And when he prepares everywhere, he will be weak everywhere.' Sun Tzu identified the link between speed and surprise, and urged commanders to 'appear at points which the enemy must hasten to defend; march swiftly to places where you are not expected'.<sup>60</sup> Both Liddell-Hart and Sun Tzu believed that speed, mobility or rapidity and manoeuvre are the essence of warfare. For example, when the coalition forces swept past the Iraqi defences with a lightning flank attack during the 1991 Gulf War, one US Marine Corps brigadier remarked: 'This is simply pure Sun Tzu.' Liddell-Hart also emphasised this point: 'Make it uncertain which way you are heading and the enemy will be forced to disperse his forces to cover all options.' He states that 'Natural hazards, however, formidable, are inherently less dangerous and less uncertain than fighting hazards'.<sup>61</sup>

Another related but important feature of indirect approach is the stress on *alternative objectives* to achieve a strategic goal. If the enemy is certain about your point of aim, they will do everything to guard themselves. Flexibility needs to be exercised in following the line of least expectation and least resistance to induce the enemy's collapse. Napoleon and General Sherman demonstrated that speedy and flexible offensive operations that threaten alternative objectives exploit the enemy's weaknesses effectively. By repeatedly putting the enemy 'on the horns of a dilemma' regarding the objectives of the attack, the enemy's capacity to resistance is seriously undermined. Liddell-Hart concluded that a 'plan like a tree must have branches if it is to bear fruit'.<sup>62</sup> Therefore the best way is to operate along a line that offers alternative objectives. Liddell-Hart's emphasis on alternative objectives reinforces Sun Tzu's emphasis on the art of deception in warfare.

Furthermore Sun Tzu's emphasis on deception in warfare underlines the importance of the acquisition and manipulation of information to one's advantage. Information warfare has become the latest buzzword in military establishments. Information warfare as a concept is not new – denying your enemy knowledge of your plans and actions is as old as warfare itself. 'Sun Tzu would have [certainly] considered the enemy's electronic nerves the perfect target; so do today's practitioners of information warfare'.<sup>63</sup>

#### *Differences between the Indirect and Direct Approaches*

Liddell-Hart criticised the Clausewitzian notion of treating war as mainly a matter of concentrating superior force. He argued that true concentration of force is the product of dispersion forced upon the enemy by manoeuvre. To concentrate *all* is impractical and even dangerous. Concentrating your force



against an object too solid to be shattered is useless and counterproductive. Effective concentration can only be achieved when the enemy's forces are dispersed, and in order to ensure the dispersal of enemy forces, one's own forces must be widely distributed or perceived as widely distributed. So force your enemy to disperse their forces widely before the start of the war. Your dispersal, their dispersion and then your concentration. In short, true concentration is the product of calculated dispersal.

Clausewitz and Liddell-Hart differed in more than one area. Whereas Clausewitz emphasised the need to attack the strongest power first in a coalition of hostile states, Liddell-Hart suggested the opposite: 'Attack the weaker side of the coalition first'. According to Liddell-Hart, 'In a campaign against more than one state or army, it is more fruitful to concentrate against the weaker partner, than to attempt the overthrow of the stronger, in the belief that the weaker partner's defeat will automatically involve the collapse of the others.'<sup>64</sup> A sort of chain reaction will follow. Like Liddell-Hart, Sun Tzu argued that in war the way to avoid the strong is to strike the weak, that is, one should strike against the enemy's most vulnerable spot rather than his strongest bulwark. For example Churchill's concept of attacking the 'soft underbelly of Europe' (Italy) was based on Liddell-Hart's principle of attacking the weaker coalition partner. So was the abortive Gallipoli campaign, which if better executed may have taken Turkey out of the war. The idea was to weaken Germany by knocking its allies out of the war.

Liddell-Hart contended that whereas military strategy is only concerned with the problem of winning the war, grand strategy must take a longer-term view – its aim is to win the peace. Here he makes an important point: if you concentrate exclusively on victory, with no thought for the after-effects, you may be too exhausted to profit by the peace, and it is almost certain that the peace will be a bad one and will contain the germs of another war. A state that expends its strength to the point of exhaustion bankrupts its own policy and future. Self-exhaustion through war has killed more states than any foreign aggressor. Sun Tzu also voiced his opposition to the humiliation and total defeat of the enemy: 'Do not press a desperate foe too hard.'

Clausewitz rejected the idea that an enemy can be overcome without great bloodshed. He took no account, said Liddell-Hart, of the outcome as enlightened self-interest, a settlement of the issue profitable to the nation. Victory, in the true sense, implies that the state of peace is better after the war than before. Statesmen should never lose sight of the postwar prospect when chasing the 'mirage of victory'. Total victory complicates the task of achieving a just and reasonable peace settlement. The terms of an unjust peace settlement lead to another war. This is exactly what happened after the First World War. Liddell-Hart wrote: that the 'object of war is to attain a better peace'.<sup>65</sup> If this is not the case, then why take the risks associated with waging war. Following the war, one still has to live with one's neighbours,

wars do not change geography. He drew our attention to the 'peace that must follow war' and warned that leaders who seek wars eventually bring about the downfall of their own state.

Liddell-Hart castigated the Clausewitzian concept of 'absolute war' and instead proposed a 'strategy of limited aim'. Liddell-Hart's concept of limited war acquired new meaning and significance in the nuclear age. Critics of Liddell-Hart argue that he was misrepresenting Clausewitz who had never said that the enemy's armed forces were the real objective and that Liddell-Hart was actually repeating Clausewitz in most of his arguments. He 'was so emotionally involved in attacking the inept conduct of the First World War and its legacy that he was unable to approach its more general causes with detachment. Instead he found a plausible scapegoat in Clausewitzian notions.'<sup>66</sup> Strategically, what Clausewitz was essentially saying was what Liddell-Hart called the indirect approach: concentrate your strength against the weakest spot of the enemy's centre of gravity.

#### *The Continued Importance of the Indirect Approach*

Whatever its shortcomings, 'the strategy of indirect approach encouraged a new generation of officers to think in terms of achieving success by surprise and superior mobility; and to make full use of science and technology to minimize casualties.'<sup>67</sup> The importance of the indirect approach lies in its stress on the psychological dislocation and deep penetration of the enemy's defences to paralyse the 'nerve system' of command. After 1945 several outstanding German generals acknowledged Liddell-Hart as their guru. His most valuable contribution to German military thought lay in his concepts of deep strategic penetration, massed armoured forces and infantry, and mechanised supporting arms independent from all-tank divisions. General Heinz Guderian paid a glowing tribute to Liddell-Hart by describing him as 'the creator of the theory of the conduct of mechanized war'.<sup>68</sup> In the Second World War, Guderian's operations exemplify Liddell-Hart's concept of mechanised warfare.<sup>69</sup> Technology created a revolution in the physical dimension of the indirect approach. For Liddell-Hart, mechanisation was the solution to the deadlock in the theatre of war, and along with J. F. C. Fuller, advocated tanks as the centrepiece of future battles.<sup>70</sup> The German *blitzkrieg* in Europe before the Second World War was a good example of bringing about the enemy's dissolution without the need to fight. Whether or not it was developed from Liddell-Hart's indirect approach the *blitzkrieg* epitomised the fundamentals of this strategy. The Germans achieved a strategic situation so advantageous that battle was unnecessary for decisive victory. Since then, advances in military technology have further enhanced the ability to dislocate the opponent's army. The utilisation of modern weapons for long-range and precision targeting has



facilitated the destruction of economic targets, lines of communication and psychological targets, which is vital to the reinforcement of highly mobile modern forces.

Even more than the Germans, it has been the Israelis who have been the best pupils of Liddell-Hart, perhaps because of their geopolitical circumstances, their limited strategic depth and their unwillingness to suffer extensive battle casualties. Liddell-Hart's writings played an important part in the Israeli operations of 1956 and 1967.<sup>71</sup> Israel's first strikes were sudden, unexpected and caught the enemy off balance, and thereby gave a decisive advantage in the first hours of the conflict. The Israelis valued and put into practice his idea that the farther from the front the enemy's line of communications can be cut, the greater the long-term benefits. Israel's Chief of Staff during the War of Independence, Yadin, acknowledged that he had tried to direct operations in accordance with Liddell-Hart's principles.

There is no doubt that the strategy of indirect approach is the only sound strategy . . . it is necessary to achieve the three following aims: (a) cut the enemy's lines of communication, thus paralyzing his physical buildup; (b) seal him off from his lines of retreat, thus undermining the enemy's will and morale; [and] (c) attack his centres of administration and disrupt his communications, thus severing the link between his brain and limbs.<sup>72</sup>

Brian Bond rightly argues that '[w]ith the growth of the defensive power and self-confidence of the Arab nations, it seems unlikely that the Israelis will have another opportunity to implement the indirect approach on the ground comparable to their successes in 1956 and 1967'. But then it was Liddell-Hart who warned against repeating tactics that have gained you one victory. 'In attempting to compare the influence of the pen over the sword, it should be remembered that Liddell-Hart himself recognized that the Israelis commanders had not merely fulfilled his principles, but also improved upon them.'<sup>73</sup>

The 1990-91 Gulf War further demonstrated the value of the indirect approach. The military planners targeted Iraq's leadership and communication facilities (the centres of administration), munitions factories (sources of supply) and, defensive weapons, bridges and railroads (severing the lines of retreat and supply). The aim of this was to soften the battleground and weaken the enemy's will to resistance before engaging the ground forces. Massive attacks on the command and control systems caused a dilemma in the minds of the Iraqi commanders, who were used to maintaining strict control of their units. General Schwarzkopf recognised that the Iraqi defences were strongest in the south and as a result he chose the line of least expectation and the line of least resistance by moving to the west of the main Iraqi positions and effectively outflanking the Iraqi forces. Repeated

rehearsals for an amphibious landing off the Kuwaiti coast were nothing but an exercise in deception that led Saddam Hussein to believe that the coalition would attack from the south. Thus the main assault came not from the south, as expected, but from the west, which was described by General Schwarzkopf as a 'left hook play'. This manoeuvre allowed the allied forces to advance to within 100 miles of Baghdad, effectively cutting off the Iraqi forces in Kuwait and allowing them only a narrow escape route northwards along the main highway, which then became a graveyard. The rapid move to cut the lines of communication left the Iraqi forces physically and psychologically trapped, resulting in their spectacularly swift defeat. The Allied land operation was preceded by massive air strikes. The physical and psychological effect this produced implies that the indirect approach may be extended beyond the continental school approach to include air and maritime warfare. According to J. C. Wylie, Liddell-Hart's indirect approach 'is an essential quality for the maritime theory'.<sup>74</sup>

An analysis of the Gulf War demonstrates that Liddell-Hart's strategy and maxims are readily applicable today. The operational success of the Allies in the Gulf War was due to the physical and psychological dislocation of the Iraqi forces, caused by a combination of the destruction of the command and control systems, the progressive erosion of morale, deception and the unexpected adoption of the lines of least expectation and least resistance. Developments in technology mean that commanders can now manoeuvre more readily, and enhance their ability to manoeuvre by selectively striking the enemy to bring about dislocation. The greatest contribution of technology is that it has reduced the limitations imposed by terrain. In essence, there are now more lines of least resistance from which to choose. Technology and mobility have extended the range of battle. Long-range weapons and precision targeting have made distant economic, communications and psychological targets easily accessible. Any approach that follows the path of least expectation and threatens the enemy's centre of gravity, thereby causing them to feel trapped, will achieve strategic objectives at minimal cost and with the most economic use of military force.

In short, the importance of the indirect approach lies in its emphasis on psychologically and physically dislocating the enemy, preferably before the start of the battle. Much of what Liddell-Hart wrote is applicable at both the operational and the strategic level: surprise, speed, deception, manoeuvre, destruction of supply lines, flexibility, economy of force, mobility, morale, and use of lines of least expectation and least resistance. These principles have stood the test of time and can be called the enduring principles of limited war. Thus it can be argued that the theoretical underpinnings of limited war and low-intensity conflict come from the strategic ideas of Liddell-Hart and Sun Tzu. Modern military technology has certainly changed the nature of war. 'Since 1945, nuclear weapons have largely forestalled major wars between states, while partisans and freedom fighters outside the



Clausewitzian model have toppled states all over the world.<sup>75</sup> The essence of future war will not be the total destruction or complete rout of the opponent. Rather it will be minimum destruction, minimum bloodshed and partial defeat of the opponent. Unlike Clausewitz, who believed that 'war is an act of violence pushed to its utmost bounds', Liddell-Hart and Sun Tzu held that the most successful general is the one who achieves his ends without battle, or with minimal losses. Sun Tzu's notion of winning a war without fighting a battle – or at least a traditional, close battle – 'may become the dominant preoccupation of military institutions'.<sup>76</sup>

To sum up, the origins of the continental school of strategy go back to Machiavelli, the Napoleonic wars and the theories of Jomini and Clausewitz, Liddell-Hart and Sun Tzu. These concepts have influenced the thinking of practitioners of the continental strategy right up to the present.

## The Maritime School

Influenced by Alfred Thayer Mahan, advocates of this school hold that control of the seas will ultimately determine decisions ashore. They believe that domination of critical sea lanes and choke points enables forces afloat to exert indirect pressure on forces ashore by means of naval blockades, interdiction missions and so on. Maritime theory thus consists of control of the sea and the exploitation of this control to help establish control on the land. It does not necessarily focus directly on the destruction of enemy forces, but rather on strangling trade and limiting manoeuvrability.

Alfred Mahan (1840–1914), an American naval officer, is hailed as the prophet of sea power and naval strategy. According to Margaret Sprout, 'no other single person has so directly and profoundly influenced the theory of sea and naval strategy as Mahan'.<sup>77</sup> Mahan's two great works, *The Influence of Sea Power upon History*, 1660–1783 and *The Influence of Sea Power upon the French Revolution and Empire*, 1793–1812, were published in 1890 and 1892 respectively. They constitute a naval history of Britain towards the end of the age of sail. According to Mahan the control of the sea – 'an historic factor' – 'had never been systematically appreciated and expounded'.<sup>78</sup>

*The Influence of Sea Power upon History* appeared at a uniquely propitious time. The following decade was crowned with international events of great significance in naval history: Germany's decision to construct a modern naval fleet, the Spanish–American War and the consequent emergence of the United States as a world power. Furthermore, naval architecture and naval technology had reached later stages of the industrial revolution: sails had given way to steam, wooden hulls to iron and steel, cannons to rifled

big guns. New weapons were soon to be introduced and specialised naval vessels were being designed for specialised naval functions.

The maritime dominance by Great Britain, the supreme example of sea power at work, was the subject of Mahan's writings. His objective was to estimate the effect of 'sea power' upon the course of history and the prosperity of nations. By 'sea power', Mahan meant command of the sea through naval superiority, and that combination of maritime commerce, overseas possessions and privileged access to foreign markets which produces national wealth and greatness (in terms of production, resources, colonies and markets).<sup>79</sup>

The central theme of Mahan's works is simple: in every phase of the prolonged contest between England and France, from 1688 to the fall of Napoleon, command of the sea by naval domination, or lack of it, determined the outcome. 'It was not by attempting great military operations on land, but by controlling the sea, and through the sea, the world outside Europe', that English statesmen 'ensured the triumph of their country'.<sup>80</sup> Mahan wrote that naval operations, especially those directed against trade and logistic supply or redeployment could be crucial to nations waging land wars. He argued that 'if navies . . . exist for the protection of commerce, it inevitably follows that 'the stoppage of commerce compels peace. Wars are won by the economic strangulation of the enemy from the sea. . . . [Wars] are lost by failure to prevent such strangulation of one's own country. Control of maritime commerce through command of the sea is the primary function of navies'.<sup>81</sup> 'Here was the clue to the rise and fall of empires [and great powers]: control of the sea or lack of it'.<sup>82</sup> Mahan's contribution to modern strategy lies in three areas: first, he developed a philosophy of sea power that won recognition and acceptance far beyond professional naval circles; second, he formulated a new theory of naval strategy; and third, he was a critical student of naval tactics.

Naval strategy and sea power are conditioned, in his view, by certain fundamental natural phenomena (such as a nation's insular or continental situation) and by national policies related to navies, the merchant marine and overseas bases. Naval tactics, on the other hand, are concerned with operations after the beginning of actual combat. Tactics – being the art of using weapons forged by man – may change as weapons themselves change. But as the principles of naval strategy have a broader foundation, they 'remain, as though laid upon a rock' and operate in times of peace as well as in times of war.

In other words, Mahan argued that technology makes a difference to naval tactics, not to strategy. 'This clear distinction between strategy and tactics was one of the things that raised Mahan above the level of earlier writers. In Mahan's view, navies are better instruments of national policy than are armies. Why? Because 'the influence of a navy could be felt where the national armies cannot go'.<sup>83</sup>



What are the elements of sea power? Extrapolating from the seventeenth- and eighteenth-century English history, Mahan postulated six 'general conditions affecting sea power' that he saw as universal and timeless in character: (1) the geographical location of a country; (2) its physical conformation; (3) the extent of its territory; (4) the size of its population; (5) the national character; and (6) the character and policy of the government.<sup>84</sup>

The main theme in Mahan's writings then, is the supreme importance of sea power in the shaping of national destinies. The major source of his writings and teachings was Jomini. It is said that Mahan took Jomini to sea. From Jomini he learned the few principles of land warfare that are applicable to war at sea: the principle of concentration; the strategic value of the central position and interior lines of operations; and the close relationship between logistics and combat. Mahan insisted that concentration of force is 'the predominant principle' of naval warfare.<sup>85</sup> This, he said, is true of naval tactics as well as naval strategy. Thus the essence of Mahan's strategic doctrine is the need to control the sea (or command of the sea), which can be done only by a concentration of force that is capable of driving enemy naval and merchant ships from the seas. Command of the sea means the ability either to bottle up the enemy fleet in port, or to destroy it in battle if it put to sea. Such a naval battle might, like a land battle according to Jomini, achieve victory by directing concentrated force onto a weak section of the enemy – as Nelson did at the Battle of the Nile in 1798. Control of the sea by reducing the size of the enemy navy is the primary consideration in a naval war. Therefore, both strategically and tactically, navies should be employed offensively. According to Mahan, 'In naval warfare, coast defence is the defensive factor, the navy the offensive factor.'<sup>86</sup>

Like Jomini, Mahan laid great stress on logistics. 'Proper naval bases and access to them by the fleet are essential ingredients to a successful maritime strategy.'<sup>87</sup> His work is pure Jomini in another sense too. Like Jomini, Mahan sought to determine the fundamental truths (or principles) of naval warfare 'which remain constant, and being therefore of universal application, can be elevated to the rank of general principles.'<sup>88</sup>

The idea of decisive battle also links Mahan with Clausewitz. The subordination of strategy to policy was as central to his scheme of thought as it was to that of Clausewitz. 'War,' wrote Mahan in 1896, 'is simply a political movement, though violent and exceptional in character . . . the military arm awaits upon and is subservient to the political interests and civil power of the state.'<sup>89</sup> Clausewitz also stressed that war is subordinate to politics.

However Mahan's analysis and interpretations have been criticised by historians, chiefly on the ground of oversimplification by omission.<sup>90</sup> First, it is argued that 'Mahan's general theories about the influence of sea power on history do not account for the rise of such obviously non-maritime empires as Russia, the Austro-Hungarian Empire, Turkey under the Ottomans, and Germany under Bismarck.' Besides, it is contended that

many factors other than naval superiority must be taken into account to explain British victories over the French in the period between 1688 and 1815. Mastery of the seas was no doubt critical, but so were the military (army) operations of England and its allies on the European continent. So too were the diplomatic successes of British statesmen in manipulating the balance of power against France by organizing and sustaining hostile coalitions among its Continental neighbors.<sup>91</sup>

According to Gerald S. Graham, there is no evidence to suggest that 'the denial of colonial commerce (by the Royal Navy) materially altered the French strategic position on the continent . . . Loss of "command of the sea" diminished but never dangerously reduced French resources and staying power. There was not . . . a "strangulation" of France by English sea power.' Mahan is also guilty of confusing a necessary cause with the sufficient cause. Sea power one of the many reasons – perhaps a very important reason – but certainly not the only reason for Britain's victory over France in the seventeenth and eighteenth centuries.<sup>92</sup>

Second, since Mahan was opposed to the division of naval forces, he failed to pay sufficient attention to the requirements of amphibious warfare and its place in naval strategy. As Philip Crowl observes: 'Power-projection from the sea, a naval mission of growing significance in the twentieth century, was thus mostly disregarded by Mahan. Even more important is his failure to give much serious attention to the interdependence of armies and navies in wartime.' Mahan 'treated the Royal Navy as an autonomous agent acting independently of military operations on the Continent and not much concerned with, or affected by, the outcome of land battles. Coordination between ground and naval forces, to be sure, was not a salient feature of warfare in the seventeenth and eighteenth centuries' (perhaps because of non-existent communication technology).<sup>93</sup> Still, Mahan's 'neglect of the utility of naval artillery and sea-borne infantry assaults against targets ashore was a serious omission' in his theory of fundamental and unchangeable principles of naval warfare.<sup>94</sup> US victory in the Pacific in the Second World War 'was the product of combined arms, not of the autonomous operations of the United States Navy. Developments since 1945 have further enhanced the interdependence of all armed services and have blurred former distinctions between land, air- and sea-based weapons to a degree inconceivable to Mahan.'<sup>95</sup>

Still, to be fair to Mahan it must be said that the issues he addressed are still relevant. He drew our attention 'to such matters as the meaning of the concept of national interest; the moral dimensions of military force; the responsibilities, as well as the opportunities, of world power; the nature of American dependence on sea lines of communication; the composition of fleets; the logistical requirements of warfare; and most importantly, the use of navies as instruments of national policy'.<sup>96</sup> He also clearly recognised the



interdependence of navies, commerce, resources and overseas markets. Mahan's writings had a practical influence on German policy second only to their influence in the United States. In addition *The Influence of Sea Power upon History* was adopted as a text in all Japanese naval and military colleges. No one could dispute his contention that the development of profitable economic interests overseas is dependent upon the possession of sea power. Nor could one deny that the possession of sea power is an essential prerequisite for great-power status. No power can be called a great or world power unless it has a significant naval capability.

### The Aerospace School

The first prophets of air power postulated their ideas well before the First World War. Major J. D. Fullarton of the British Royal Engineers proposed in 1893 that a nation at war would require 'command of the air' and future conflicts would see 'the chief work . . . done in the air, and the arrival of the aerial fleet over the enemy's capital will probably conclude the campaign'.<sup>97</sup> H. G. Wells' novel *War in the Air*, written in 1908, described an aerial assault that made all preceding technology redundant and caused devastation beyond that previously experienced.<sup>98</sup> These visionaries, however, are not the accepted 'early advocates of air power'. That distinction lies with others who provided the conceptual foundation for the use of air power.

### Giulio Douhet, Billy Mitchell, Hugh Trenchard and Alexander de Seversky

The 'early advocates' refers to those involved in promoting the importance of air power prior to the Second World War. Air power's original proponents include Giulio Douhet (1869–1930) of Italy, William (Billy) Mitchell (1879–1936) of the United States, Sir Hugh Trenchard (1873–1956) of Britain and Alexander de Seversky (1894–1974) of Russia. They are called 'early advocates' because they 'postulated their ideas at a time (just after the First World War), [when] little experience had been gained from the use of aircraft for military purposes'.<sup>99</sup> Unlike the continental and maritime strategists, the early air power theorists were unable to base their theories on the lessons of history. They essentially argued that air power was, or had the potential to be, a weapon of immense capability. Therefore the war of attrition experienced in the First World War, which led to significant loss of life, could become a thing of the past. Much like Liddell-Hart, their ideas

were influenced by the conduct of the First World War. They believed that the outcome of future conflict would be decided not on the ground in trench warfare, but up in the air. They were all convinced that strategic bombing or the use of offensive air power could shatter the morale of the civilian population and destroy the enemy's defence-industrial infrastructure and thereby end the war very quickly.

By air power, we mean the use of aircraft for military purposes. Air power has redrawn traditional battle lines and introduced a third dimension into warfare. With this, the claim that air power is 'the ultimate strategic weapon' has often been advanced – 'ultimate' in the sense that it is final and decisive and impossible to exceed or override; and 'strategic' in the sense that it is used as an instrument of national policy. To be 'the ultimate strategic weapon', a weapon system must be capable of bringing about the 'surrender' of a nation through its strategic and not its tactical application, in a manner superior to all other means.

In this context it is useful to remember the distinction between a 'strategic weapon' and a 'strategic strike'. A strategic strike is the tactical or operational application of a particular weapon system. The Israeli air raid against Iraqi nuclear installations in the early 1980s is a good example of a strategic strike. A strategic weapon, on the other hand, is a weapon system with the utility or the capability to achieve strategic goals. An ultimate strategic weapon can therefore be interpreted as a weapon that enables the execution of a strategy. The aerial atomic attacks on Japan in August 1945 are the only example of this. In this sense an aircraft armed with nuclear weapons can be regarded as an ultimate strategic weapon if it brings about the complete surrender of the enemy.

What follows is a comparative analysis of the theories espoused by Douhet, Mitchell, Trenchard and Seversky and whether their theories have stood the test of time, plus a brief analysis of the role of air power in the 1990–91 Gulf War. As noted earlier, 'any study of classical strategists must bear in mind the time and context in which they postulated their ideas. Each was driven by his own national view of history, geography, economics, politics, science, technology, psychology, society and military affairs. . . . [Air power theorists] were more concerned with developing theories specific to their respective nations', not with producing a universal theory based upon commonly accepted principles.<sup>100</sup>

Giulio Douhet, an Italian army officer, is the best known of the early air power advocates. In his book *Command of the Air*, published in 1921, he enunciated a theory for the strategic application of air power. He argued that 'To conquer the command of the air means victory; to be beaten in the air means defeat'. Douhet's concepts reflect Italy's geographic position. Due to Italy's susceptibility to invasion, Douhet believed that a 'first strike' capability was necessary to ensure the maintenance of the sovereignty of his nation. Thus he recommended offensive action to achieve defence.



Douhet wrote: 'Victory smiles upon those who anticipate the changes in the character of war, not those who adapt themselves after the changes occur.'<sup>101</sup> The key elements of Douhet's theory are that command of the air or air supremacy is essential to victory. The enemy air force should be destroyed on the ground through attacks on airfields and aircraft factories. The airplane is 'the offensive weapon par excellence', and all future conflicts would be 'unrestrained total wars with no distinction between combatants and non-combatants. The entire population and all the resources of a nation would be sucked into the war because wars would be won by attacking the weakest points in the enemy's defences, that is, population centres and civilian morale.' Successful offensives by ground forces are no longer possible. Douhet also emphasised the need for the 'progressive decrease of land and naval forces'. As a result, a nation must be prepared at the outset to launch massive bombing attacks on the enemy's centres of population, government and industry – hit first and hit hard to shatter civilian morale, leave the enemy government no option but to seek peace; and to do this, an independent air force armed with long-range bombers is the primary requirement.<sup>102</sup>

Douhet predicted that death and destruction inflicted on the enemy by bombers laden with high explosives, chemical or biological weapons would lead to a complete breakdown of the social structure of the enemy country and the terrified public would induce their government to surrender. Douhet advocated the deployment of aircraft, not as a means of augmenting existing ground forces, but as a means of taking war to the very heart of the enemy, 'by the bombardment of the centres of population in an effort to destroy opposition civilian morale'.<sup>103</sup> In Douhet's doctrine, victory is assured when 'command of the air' has been achieved.

Douhet expressed air power in its purest form, unhindered by a counter-force. In his view there is no other weapon, be it machine gun or tank, capable of changing the face of warfare like air power. In Douhet's thinking, air power is the ultimate strategic weapon because he defined strategy only in terms of the imagined destructive potential of air power. For Douhet there was only one strategy, and that was total war.

Douhet dismissed the effectiveness of surface air defences such as radar, arguing that 'Nothing man can do on the surface of the earth can interfere with a plane in flight'.<sup>104</sup> How wrong he was! This tendency to ignore or underestimate any technological, organisational or tactical means by which a nation could defend itself from aerial bombardment led him to over-estimate the effect of bombing on civilian morale and national pride.

As noted earlier, Douhet's ideas were influenced by the First World War, which was characterised by stalemate and mutual mass slaughter. It was against this background that strategists such as Douhet and Liddell-Hart were looking for short-cuts to victory. And air power was seen as providing that short cut to victory. As he wrote: 'Future wars may yet prove to be

more humane than wars in the past in spite of all, because they may in the long run shed less blood.'<sup>105</sup>

Billy Mitchell led the campaign in the United States for an independent air force. His ideas were somewhat less strident than those of Douhet, however. Mitchell had a broader interest than Douhet in all levels and types of aircraft, not just bombers. He advocated a mixed air force of fighter, pursuit and bombing aircraft. This 'mix' was necessary to complete his concept of operations for the defence of his country. The central theme of Mitchell's work was not strategic bombing but 'the centralized coordination of all air assets under the control of an autonomous air force command'.<sup>106</sup> If this was achieved, he felt, everything else would fall into its proper place.

Unlike Douhet, the air force for Mitchell was the 'shield and the sword' (first defence, then offence) rather than a purely a first-strike force. He did not want to limit air power to a purely strategic bombardment role. Mitchell foresaw the use of air power in support of ground operations, against shipping and in air combat operations. He believed in the tactical use of air power for the destruction of enemy surface combat forces. He argued for selective military targeting, in contrast to Douhet's bombing of population centres.

Mitchell did not advocate air power at the expense of ground forces. He did not think, as Douhet did, that the enemy's surface forces could be ignored. Nor was he convinced of the ability of air power alone to achieve victory. He 'appreciated the importance of concerted action between land, sea and air forces'.<sup>107</sup>

There were, however, some similarities in the strategic thinking of Mitchell and Douhet. Mitchell was convinced that 'in an age of aerial warfare, ground and naval campaigns were subsidiary to the main air effort, if not totally unnecessary'.<sup>108</sup> He provided a dramatic demonstration of his theories by sinking the captured German dreadnought *Ostfriesland* with 2000 pound bombs during trials off the coast of Norfolk, Virginia in 1921.<sup>109</sup> He echoed Douhet by saying that 'neither armies nor navies can exist unless the air is controlled over them'. Like Douhet, Mitchell believed that strategic bombing could have 'a greater influence on the ultimate decision of war than any other arm', and in the long run would provide a more humane outcome to war. Also like Douhet, he 'failed to conceive the effectiveness that Anti-Aircraft Artillery and Surface-to-Air Missile systems were to achieve'.<sup>110</sup> Mitchell's advocacy of a mixed air force structure shows his preference for a tactical aviation role. This could be interpreted to mean that, for Mitchell, air power was not the ultimate strategic weapon in the sense it was for Douhet. For Mitchell, air power was a strategic weapon but not *the* ultimate strategic weapon.

Air Marshal Hugh Trenchard, also called the Father of the Royal Air Force, was the only early air power advocate to command an independent air force. He subscribed to Douhet's belief that 'the nation that would stand



being bombed the longest would win in the end'.<sup>111</sup> His ideas are considered less consistent than those of some other theorists however. Like Douhet, he believed there was no defence against the bomber and that bombing would have a massive moral and material effect that would be sufficient to break down an enemy's resistance. Trenchard proposed four principles for the use of air power: (1) gain and maintain air supremacy; (2) destroy, through strategic bombing, the enemy's means of production and communications; (3) prevent enemy interference with friendly land, sea and air operations; and (4) prevent the freedom of action of enemy land, sea and air forces.

Like Douhet and Mitchell, Trenchard believed that there was 'abundant evidence that armies and navies are powerless unless we [the air force] control the air'.<sup>112</sup> Trenchard saw the navy as serving a valuable role in protecting one's own trade and disrupting the trade of the enemy, but with a much smaller fleet composed of small ships and submarines. As for the army, he saw its initial role as that of 'base' protection and defence of the homeland with anti-aircraft guns. Once air supremacy had been achieved, he saw the need for a smaller, 'highly trained, more efficiently equipped and more mobile army to occupy the enemy's country and to bring about enemy's ultimate defeat'.<sup>113</sup>

In this later requirement, that of formally occupying the enemy's territory, Trenchard differed significantly from Douhet (and Mitchell). The last stage of the 1990-91 Gulf War showed the validity of Trenchard's argument. As General Norman Schwarzkopf wrote, from an infantryman's point of view 'there would always be a need for an Army. Who had ever seized and held territory with an airplane'.<sup>114</sup> Furthermore, unlike Douhet, Trenchard opposed the indiscriminate bombing of cities but favoured strategic bombing of 'legitimate military targets . . . even if such attacks caused incidental loss of civilian life and destruction of civilian property'.<sup>115</sup>

Trenchard does not appear to have advocated air power as the ultimate strategic weapon. He did believe that air attacks would produce a much quicker end to wars, and this indicates that he considered air power to be of more importance than land power, and therefore like Mitchell he saw air power as only a strategic weapon. He viewed strategic air power as being capable of accelerating victory, but a victory that, in the final analysis, must be earned on the ground.

Like other air power theorists, Alexander de Seversky, in his book *Victory through Air Power*, argued that air power was paramount over land and naval warfare. Like Douhet, he believed that the army and navy would be required to play a waiting role while the bomber pounded the enemy into submission. He believed that air power alone could cause an enemy to surrender without the need to resort to traditional military action. Like Douhet, he was an enthusiastic advocate of air power as the ultimate strategic weapon. But much of his writing could be classified as science

fiction and he is not regarded as a serious strategist. Seversky was more preoccupied with marketing or propagating the military capacity of aviation.

To sum up, for Douhet and Seversky air power was the ultimate strategic weapon, for Trenchard it was a strategic weapon, and for Mitchell it was a weapon of immense potential, capable of augmenting and transforming battlefield action.

Despite the many, though subtle, differences between the four theorists, the similarities are notable. They saw the aeroplane as the ultimate offensive weapon and believed that anti-aircraft artillery would be ineffective, and also doubted the efficacy of airborne interception. They all emphasised the importance of strategic bombing to shatter the enemy's economic, industrial and population centres and its will to wage war; the need for an independent air force and the offensive use of air power as the guiding strategy; the need to gain and maintain command of the air, or air supremacy; the need to relegate ground and naval forces to secondary roles; and the need to see air power primarily as a means of deterrence and coercion.

Subsequent air wars have confirmed some of the ideas of the early theorists but have also revealed serious shortcomings. The Second World War provided the first opportunity to validate these theories. But the war showed that Douhet and others had been too optimistic. Firstly, effective air defences could be used against bombing campaigns, both from the air and the ground. Secondly, bombing raids against the civilian population were not as effective as the air power theorists thought. As a matter of fact, during the blitz, civilian morale increased in defiance.

Though weapons of mass destruction (gas and biological weapons) were not used in the Second World War, one could argue that the aerial delivery of atomic bombs at the end of war was consistent with Douhet's theory of air power. Thus only in the case of nuclear warfare did air power prove its potential as the ultimate strategic weapon. In subsequent conflicts, however, total war has been avoided. Douhet's principle, which required destruction of the enemy's air force on the ground, was the basis of Israeli's strategy in the 1967 war and it helped to bring Israel a quick victory. The Second World War did support the more general theories of Mitchell. His concept of air power included the need for bombers, fighters and ground attack aircraft, and together these did contribute to victory. The limitations of air power were evident in conventional conflicts in the Middle East, Korea and the Indian subcontinent and in revolutionary warfare (such as in Vietnam and Afghanistan), demonstrating that air power is not necessarily the panacea the early advocates portrayed.

The 1990-91 Gulf War has been seen as a watershed for air power, with some military observers claiming that it represents an outstanding success for the air power theorists. The total paralysis of the Iraqi Air Force and the ineffectiveness of ground and air defence systems allowed the allied forces



to gain air supremacy and launch deep penetration strikes. Apart from destroying vital military and industrial facilities, air power is believed to have brought sufficient pressure to bear on the civilian population to shatter the Iraqi's will to fight. Though no weapons of mass destruction were used, this strategy appears to have been an almost classical Douhetian air power strategy. During the Gulf War 'a big banner in the snack bar at the US Air Command Staff College, Maxwell Air Force Base, Alabama, proclaimed that: "Mitchell and Douhet were right!",<sup>116</sup> Edward Luttwak declared that '[i]n Desert Storm, air warfare had finally recovered the lost qualities of Air Power that Douhet, Mitchell and Trenchard and other theorists of the 1920s had taken for granted... the promise of "victory through Air Power" was finally redeemed in the Iraq air war'.<sup>117</sup> Had the early air power advocates been able to follow the events of early 1991, there is little doubt that each would have claimed some credit for the successful employment of air power during the Gulf War. Some even claim that the war against Iraq was won by air power alone long before the start of the ground offensive.<sup>118</sup>

However it is inappropriate and premature to say that air power alone won the Gulf War. The Gulf War did highlight the effectiveness of air power in a limited war, but the combined onslaught of the world's most modern, high-tech air powers failed to destroy Iraq's military machine, especially its nuclear, chemical and ballistic missile production centres. This was despite the fact that Iraq's air defences were weak and its air force played hardly any role in the war. Moreover Eliot Cohen contends that the air campaign had very little to do with the kinds of operation envisaged by the original theorists. No theorist envisaged an attack on the telecommunications systems of an enemy or the ability to attack large population centres without killing many civilians. He claims that the Gulf War showed the potential strength of air power but under extremely favourable conditions. 'Military, the coalition enjoyed a favourable air situation, qualitatively and quantitatively, from the very beginning of offensive operations.'<sup>119</sup> As Cohen argues: 'Increasingly, all forms of warfare have an air component: armies and navies cannot function unless they exploit the third dimension. This trend, however, does not necessarily mean the dominance of air forces as we have known them, much less the vindication of early theories of aerial warfare.'<sup>120</sup> Air power can wreak great destruction in favourable circumstances, circumstances that may well not apply in future conflicts. It is also unlikely that a future Third World combatant would behave in a similar manner. Nor is one likely to present a target system suitable for attack, as did Iraq. Not only that, the Gulf War will stimulate a search for cheaper and more effective air defence systems that may make the future use of air power less effective.

The success of air power in the Gulf War was most evident in its tactical application against surface forces. When used together with an effective psychological operations campaign, it encouraged mass surrender. In this

sense the Gulf War shows that air power is indeed a valuable strategic weapon, but certainly not the ultimate strategic weapon.

Here it is worth remembering one important fact: throughout history, weapons have appeared that have been referred to as 'the ultimate strategic weapon', or a weapon for which there is no answer. Just as frequently, weapons have been developed to counter them. For example the longbow prompted the introduction of body armour, with the sword came the shield, surface fleets saw the evolution of submarines, anti-aircraft defences were built to counter air attacks, and nuclear weapons, which until recently were seen as the ultimate strategic weapons, have not proved to be an exception. For example the US 'Strategic Defense Initiative' or 'Star Wars' project was aimed at rendering nuclear weapons obsolete in the twenty-first century.

Hence we must take care when assessing the impact of a new weapon system and selecting the force structure. Those early advocates of air power who considered it the ultimate strategic weapon did so because they incorrectly assessed the nature of air power and strategy. They did not fully understand air power's limitations; they overestimated its effect and potential, and they failed to appreciate that the technological, organisational, tactical and political reactions to the threat posed by air power would render it less potent. Put simply, they underestimated human ingenuity. The fact that some analysts advocated fighting the Gulf War with air power alone shows that the risk of repeating the errors of the past is always there. Although it cannot be denied that modern air power has gained much with the introduction of precision guided munitions, as demonstrated in the Gulf War, the idea of air power winning wars by itself is likely to remain an illusion until air forces acquire a weapon that is both destructive and indiscriminatory and is used in a total war. With the advent of second-strike capabilities, Douhet's first-strike concept has lost all practical relevance. Besides, as will be argued in Chapter 9, total war is less likely now. In the twenty-first century, localised, regional wars are much more likely than a no-holds-barred, global shootout. The Gulf War showed that air power can be highly effective when its limitations are understood and it is used without compromise in limited wars for limited purposes. Air power is not a panacea for all types of conflict. Alone it has not and will not deliver victory. It appears that Mitchell's less ambitious claims for air power have so far been vindicated in what is still a developing area of warfare.

## The Revolutionary School

Revolutionary warfare differs from conventional interstate or international conflicts in the sense that revolutionary wars are *intra*state wars; they occur



*within* states. The chief objective of revolutionary war is 'the seizure of political power by the use of armed force, destruction of an existing society and its institutions and their replacement with new state structure'.<sup>121</sup> Marx, Lenin, Mao Tse-tung, Ho Chi Minh and Che Guevara were the leading proponents and practitioners of this type of warfare. Widespread popular discontent is the primary cause of revolutionary war. 'The revolutionary war is a war of the masses; it can be waged only by mobilising the masses and by relying on them', said Mao Tse-tung. Moreover 'a revolutionary war is never confined within the bounds of military action'.<sup>122</sup>

Revolutionary warfare can assume different forms: wars of national liberation, rebellions against or violent efforts to overthrow an established sociopolitical system, civil war or people's war, secessionist movements, guerrilla war, insurgency and small wars. According to John Shy and Thomas Collier, 'Revolutionary warfare, as a fully developed concept, is a relatively recent phenomenon largely because it is so closely associated with two aspects of modernity – industrialism and imperialism'.<sup>123</sup> Nationalists, Marxists and other radical critics of imperialism, capitalism and feudalism were among the first to mobilise people in support of armed struggle to overthrow oppressive regimes in Asia, Africa and Latin America. There are others who argue that this type of warfare has always existed. It is reminiscent of medieval warfare, which was marked by widespread pillage and the avoidance of pitched battles. They attribute the strategic principles of revolutionary warfare to Sun Tzu. In fact contemporary interest in Sun Tzu owes a great deal to the success of revolutionary and insurgency movements in the twentieth century, particularly the campaigns of Mao Tse-tung in China and Ho Chi Minh in Vietnam. Many of Sun Tzu's strategic ideas were adopted by the practitioners of guerrilla warfare – avoid costly pitched battles, attack weakness and avoid strength, use hit and run tactics, elude enemy pursuit by hiding in the hills, in forests or among the populace, and forage off of the enemy.<sup>124</sup> Thus in a sense Sun Tzu laid the foundations of revolutionary warfare. Mao Tse-tung was a great admirer of Sun Tzu and his military writings. All of Sun Tzu's reasons for taking a country intact were pertinent to Mao as a revolutionary. It provided his logistical support. Destroying it would have been quite counterproductive and costly to rebuild. His was a battle for the hearts and minds of the people. Mao's military ideas have the same ring of simplicity as those of Sun Tzu. When the enemy advances, retreat. When the enemy halts, advance. When the enemy seeks to avoid battle, attack. When the enemy retreats, pursue.

Small bands of revolutionaries armed with small arms and the tactics of revolutionary warfare have succeeded in forcing large occupying armies to withdraw. Revolutionary war is by and large the tool of the weak against the strong. That revolutionaries resort to guerrilla warfare reflects their recognition of the fact that their opponents are stronger militarily. It is said

that 'revolutionary war has flourished in the nuclear age precisely because new weapons have made war between great military powers impossible or too dangerous'.<sup>125</sup> There have been instances when the growing costs of waging a conventional war have forced traditional rivals to turn to unconventional means to achieve their strategic objectives, as in the Middle East and the Indian subcontinent. As in the past, revolutionary warfare will remain the predominant form of conflict in the future. As we approach the turn of the century, revolutionary warfare is manifesting itself in two types of low-intensity conflict: ethnic conflict and urban warfare. These types of warfare will be discussed more fully in Chapter 9.

## Conclusion

The preceding analysis demonstrates how and why the works of classical strategists, written more than 200 years ago, remain as relevant in the information age as they were centuries ago. It provides an understanding of the origins of modern strategy and how earlier influences continue to impinge on defence policy makers. While the instruments of war may have radically changed the conditions of battle, there is an underlying continuity in ideas about war and how to wage it. Many of the principles of war outlined by classical strategists are simple and easy to understand – the difficult part is to apply them. They vary from nation to nation according to historical experience and need, but it is possible to find certain common denominators that apply not as a check list to be slavishly followed, but as a series of common-sense points to be borne in mind. They also serve as a useful framework for the study of war and strategy.

Concepts such as the objective of battle, concentration of force, economy of effort, the advantage of superior numbers, the use of surprise, the role of friction, the uncertainty of war, the centre of gravity, the psychology of defence and offence, careful planning, the need for peace-after-the-war thought, strategic reserves, the indirect approach, initiatives at every level, the political nature of war and the culminating point of victory are timeless. They form the basis of much current strategic thought and are reflected in the military doctrines of most modern armies. These principles of war have stood the tests of analysis, experimentation and practice. These strategies all form the basis of political objectives in everyday discussions of deterrence, conflict management, crisis diplomacy, insurgency, arms control and limited wars in our post-nuclear information age.

To sum up, continental strategy, naval strategy, air strategy and revolutionary strategy have one thing in common: they all emphasise the need to strike a decisive blow to force one's will upon an opponent, preferably



without a direct assault on the enemy's main forces. It is important to ensure that fighting is not prolonged and that a decisive result is achieved as soon as possible. An important means of achieving this is to be stronger than one's enemy. These days military planners do not speak in terms of a continental strategy or an aerospace strategy or a naval strategy. The Second World War blurred the distinction between the different schools of classical thought and resulted in the joint application of force, in which comprehensive strategies were used to combine or coordinate the assets available in the different dimensions towards a single strategic or operational objective. As the 1990-91 Gulf War demonstrated, we live in an age of joint warfare where there is no such thing as a purely land war, sea war or air war.

## Notes

1. C. von Clausewitz, *On War*, ed. and trans. M. Howard and P. Paret (Princeton, NJ, 1976) p. 149. And air power theorist Giulio Douhet added: 'Whenever two men meet, conflict is inevitable.' G. Douhet, *The Command of the Air* (Rome, 1921, trans. D. Ferrari, Washington, DC, 1983) p. 3.
2. P. A. Crowl, 'Alfred Thayer Mahan: The Naval Historian', in P. Paret (ed.), *Makers of Modern Strategy: From Machiavelli to the Nuclear Age* (Princeton, NJ, 1986), p. 468.
3. D. K. Pait, *War in the Deterrent Age* (London, 1966), pp. 32-5, emphasis added.
4. F. J. West, *The Classical Strategists* (Geelong, Vic., 1990), p. 4, pp. 3-12.
5. M. van Creveld, *Command in War* (Cambridge, MA, 1985).
6. R. O'Neill, quoted in Michael Howard (ed.), *The Theory and Practice of War* (London, 1965), p. iii.
7. Australian Army, *Manual of Land Warfare, Part One, Volume 1, Pamphlet 2. The Fundamentals of Land Force Operations*, 1985 (Canberra, ACT, 1985) pp. 2-4.
8. United States Army, 'Operations', in *Field Manual 100-5* (Washington, DC, 1986).
9. British Army, 'The Fundamentals', in *Army Field Manual*, vol. 1 (1985), cited in Z. Lantini, 'The "Principles of War" and Military Thinking', *The Journal of Strategic Studies*, vol. 16, no. 1 (1993), pp. 1-17.
10. Pait, *War in the Deterrent Age*, op. cit., p. 34.
11. F. Gilbert, 'Machiavelli: The Renaissance of the Art of War', in Paret, *Makers of Modern Strategy*, op. cit., pp. 23-6.
12. *Ibid.*, p. 31.
13. H. Lloyd, cited in Howard, *The Theory and Practice of War*, op. cit., p. 5.
14. *Ibid.*, p. 10.
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## CHAPTER 3

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# Realism and Security Studies<sup>1</sup>

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Realism occupies a paradoxical place in the study of international politics, commonly regarded as the dominant paradigm in the field, partly in the subfield of international security studies. At the same time it is frequently criticised. Almost all issues of the leading journals of international politics contain articles that claim to have refuted realist theory articles and books pronounce that realism is dead, inadequate or variant.<sup>2</sup> Others argue that realism does a poor job of explaining a particular event or type of event and that other theories – particularly those that include domestic politics – offer better explanations.<sup>3</sup>

The end of the Cold War gave new impetus to the perennial debate about realism. The sudden collapse of communism in Europe and the recent peaceful dissolution of the Soviet Union stimulated critics of realism to forward two arguments. First, they claimed that realism had failed to predict the end of the Cold War, the collapse of the Soviet empire and the sudden transformation of US–Soviet rivalry from enmity into partnership. Second, they argued that realism would not be useful for understanding international politics in the post-Cold War world. These criticisms prompted a vigorous response from realists.

This chapter examines the following questions: What is realism and how has it evolved as a theory of international politics? What are the important criticisms of realist theories? What are the current theoretical issues in the debate on realism? Is realism still relevant in the post-Cold War world?

## What is Realism?

Critics and proponents often refer to realism as if it were a monolith of thought. This view of realism overlooks the tremendous diversity of thought within the realist tradition.